**Storing and Retrieving Data - Project Report**

**Sneakersly – Shoe Shop**

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**Description of our online shop**

Snearkersly is a shoe shop founded in 2020. The aim of the enterprise is to deliver many types of shoes using only an online shop. With a vast range of products, *Sneakersly* offers sneakers, golf shoes, hiking boots, running shoes, and others.

The shop relies on a wide range of suppliers that grant the stocks to allow us to deliver any shoes at any time.

In order to buy a product in our online shop the customer needs to register with a valid email address. Upon registration a unique customer ID is associated to the customer. This customer ID will stay associated to this particular customer for future purchases as well. For ordering products the customer has to enter the required details for delivery, such has the delivery address, the desired products and their quantities. During the purchase process, a unique order ID is generated.

**The database**

The online shop has a stock of products. The table 'stock' keeps track of all the products that are currently in stock. One row represents one specific product, such as the pair of shoes ‘Nike\_123’. Each specific product has an available quantity associated with it. This quantity of items in stock of a certain product is represented by the attribute type ‘available\_quantity’.

Stock is added by ordering and receiving from our suppliers who are represented by instances/rows in the table ‘supplier’. Each instance/row of this table represents one of our suppliers.

When we order from our suppliers, a ‘supplier\_order’ is created to which ‘supplier\_order\_items’ are associated. These are also created in the process of creating the order.

The products *Sneakersly* sells are all from the available stock. It is ensured that no order can be processed that contains more items that are currently available.

Customers are represented by instances/rows in the table 'customer'.

When a customer makes an order, a row in ‘customer\_order’ is created to which ‘supplier\_order\_items’ are associated. These are also created when the order is made.

The purpose of the table ‘log\_price‘ is to keep track of any changes in the prices of products in stock. For example, if the price of a certain pair of shoes is lowered from 50 EUR to 40 EUR, this will be automatically documented in ‘log\_price’.

Figure 1 shows the EER diagram of the database of *Sneakersly*.

Diagram

Description automatically generated

Fig 1 : *Sneakersly* database EER diagram